‘My grandfather is dead’: narratives of culture and curriculum

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Introduction

Curriculum, the term used to denote a course of study, has been understood in recent years as a documented program developed by experts and managed by an education authority. In many cases this has resulted in a focus on the experience and the goals of dominant cultures, so that minority groups do not feel well-represented in the curriculum. In this paper we explore the possibility of young people using mobile devices to enrich their curriculum by contributing content that encapsulates aspects of their lives.

In a short project, we provided indigenous secondary school students from both urban and isolated communities in the Northern Territory of Australia with camera phones, and, in conjunction with their teachers, encouraged them to freely record and reflect on aspects of their lives. We found that they created artefacts of personal and cultural identity, and in some cases, extended digital narratives, of which they were clearly proud.

Background

Our view of learning draws on Dewey (1910), who saw it as the process people engage in when constructing knowledge rather than the transmission of information from those who have it to those who do not. Learning is however, mediated by both tools and people (Vygotsky, 1978). With regard to technology, Roschelle (2003) suggests that we should identify the simple things that technology does well, and understand the social practices by which these things become powerful education interventions. Similarly, Heppell argues that while mobile phone technology is important, what matters most is what students and teachers can do with it (Cole, 2003). We see a continuum of user activity from consumption of digital material via the Internet and mobile delivery methods; through reproduction, such as compiling a digital presentation from other sources; to creation, such as making new digital products (Hartnell-Young & Vetere, 2005). We believe that creating content plays an important part in learning, and that mobile tools are particularly useful in supporting creation, in the style of ‘citizen journalism’. They allow for situated learning, where people make meaning as a product of activity and the culture and context in which that activity occurs (Lave & Wenger, 1994). Learners can engage in and capture both planned and unplanned experiences, so that their activities have an authenticity that takes into account the social and historical context (Brown & Duguid, 1996). Their experience becomes part of their curriculum. Learners can gain knowledge and skills, and feeling a sense of agency in the world.

Perspectives on curriculum have shifted over recent centuries. Goodson (1994) traces the shift from a respect for learners’ life experience, incorporating a two-way conversation between teachers/elders and learners, to a paradigm of control of knowledge, and the use of curriculum as a mechanism to differentiate between people. Andy Hargreaves (1994) argues that the content and categories are a powerful device of social selection and social control: in terms of gender and race, and also social class.

As a result of legislation designed to enshrine people's right to education, formal schooling became associated with a repression or denial of the life experience of many pupils as expressed in dialect or in traditional cultural forms. Increasingly, nations document detailed curricula that teachers must implement and be accountable for. Some critics argue that such documented curriculum frameworks allow teachers (and thereby students) little control over the content (Cuban, 1984; De Marrais & LeCompte, 1999), while others see them as flexible design spaces that can be filled with a wide range of learning activities that teachers and students devise together (Hill & Russell, 1999; Petraglia, 1998; Scardamalia & Bereiter, 1999). We take the view that the many activities of teachers and students could contribute to a curriculum for building knowledge.

Accompanying recent trends to formalise curricula is the concern, in some countries, that learning should be 'personalised' (D. Hargreaves, 2004). However it is argued that many young people already have highly personalised digital experience, not adequately acknowledged in formal school settings (Green, Facer, Rudd, Dillon and Humphreys, 2005). Their report contains a Learner's Charter 'that includes the words 'to be supported to co-design my own curriculum and learning goals'. In this context, some see new technologies as a means of personalising learning using individualised devices, crossing boundaries between in-school and out-of-school time, and valuing the content and life experience that learners choose to share through telecommunications, blogs and social networking software. Berth (2006) suggests that, based on her research with young people, incorporating everyday technologies in the curriculum can transcend any distinction between formal and informal learning.

We suggest that a broad view of curriculum would acknowledge and value these aspects of learners' experiences. However, the ability to capture everyday activities both purposefully and opportunistically has led to vast stores of digital fragments. In our previous work with people using mobile devices, we have observed their attempts to make order out of collections of fragments. Evidence of everyday activities may not be immediately useful but could well have merit as a reminder or for its educational or evocative qualities (Marshall & Jones, 2006). Marshall and Jones (2006) discuss how activities such as associating material with a particular taxonomy and establishing a stable sense of place are important for sense-making.

Narratives are a form through which people understand their world, at least in part (Bruner, 1991;Mateas & Sengers, 2003). By creating stories around phenomena, we make sense of experiences and are able to recount them to others. According to Plummer (2001), it is only through narratives that memories exist, and without narratives we lose connection to who we are and where we have come from. Narratives integrate fragmented artefacts into a whole, giving a temporal context. Eggins and Slade (1997) suggest four categories of storytelling texts: anecdote, exemplum, recount and narrative, following Plum (1988). As their focus was on conversation, they did not address visual media, as we attempt to do in this paper. Narrative, they say, involves complication followed by resolution. An anecdote is a story that builds up some disturbance, followed by a reaction. Exemplums have an explicit message on how the world should or should not be: what matters is the significance of the events in the context of culture in which the story is told. Recounts simply involve retelling events, in a time sequence, without a crisis or climax.

We believe that mobile devices as particularly useful in supporting the creation and sharing of knowledge, and in creating digital stories, and we explored this with indigenous young people in Australia, whose culture has been passed down through oral narratives. An English term–song lines–has been used to describe the 'maps written in songs, depicting mythic events along a trail that winds through a region, singing the world into existence' (Chatwin, 1988). Recently new media have been used to capture the stories. A recent movie, Ten Canoes, was made in a local aboriginal language, by a cast made up mainly of untrained actors. The director has said 'The mob in Ramingining has embraced it as their true story. It is for them to show their children where they come from and where their ancestors come from. For the rest of the world it's got to be an entertainment and a journey into a world you've never been before' (de Heer in Kuipers, 2006). As many young indigenous people are keen to use new technologies, it seemed appropriate to involve them in our research.

Rationale and Method

In 2004, when Nokia announced their Lifeblog software, we recognised the possibility of using the software to capture and organise fragments of evidence of everyday life as well as school experience, and conducted a pilot study with individuals and families in a range of settings (Hartnell-Young and Vetere). In addition, one of the authors was managing a national project in boys' education in Australia, which addressed particular concerns about indigenous learners and the capacity of information and communications technologies to engage boys in learning. It seemed appropriate to allocate part of our ongoing work with mobile phones to a small project in this area. Nokia (Finland) had provided us with 1 megapixel camera phones (model 7610) running Lifeblog software. The software automatically stored text, images and video including SMS and MMS, and sorted this collection of material chronologically in the Timeline feature. Editing software enabled users to modify images and video clips (the muvee feature).

The emphasis on time supports a storytelling form. Photographs and videos could be easily labelled easily, and annotated with separate text notes. Synchronising the phone with a PC enables the material to be saved into the computer's Lifeblog software, where the view stretched seamlessly along the Timeline. We hypothesised that the organising capacities of the software, and the opportunity for reflection, could also make it useful for learning.

With the support of two schools in the Northern Territory, we provided one camera phone with Lifeblog software to each of five indigenous students, four of them boys. This demographic group often displays low literacy scores, irregular school attendance, and a high proportion of discipline incidents in school. After discussions with teachers who believed that the students would benefit from using the devices, we left them and their teachers to make the decisions about how to use them, and returned several weeks later to see what they had done.

The participants were all secondary school students, one from an island community who attended boarding school in Darwin, a female boarder from a remote community in another state, and the others from the urban area. Table 1 shows some characteristics of the students. They used the phones at home and school, but rarely took them out on Friday nights, for fear of theft. A teacher in each school took a light-

handed approach to supporting the students with technical requirements, such as with connection to suitable PCs, as none of the students had a computer at home. We asked that participants share the material in their Lifeblog with us at several points in time, and visited each student at least once at their school for a face to face discussion about the material, which we recorded and transcribed. One student's phone was stolen when she returned to her home town.

Student A	Student B	Student C	Student D
Male, urban	Male, urban	Male, remote (islands)	Female, remote (interstate)
14 years old	13 years old	17 years old	17 years old
Little phone use; rare computer use	Little phone use; rare computer use	Pre-paid mobile; no email	Some mobile and email use. Phone stolen early in project

Table 1. Participants in the Lifeblog project

Our approach adapted the 'cultural probes' techniques developed by (Gaver, Dunne, & Pacenti, 1999), extended by contextual interviews (Beyer & Holtzblatt, 1998). In this case, we used the handset as the probe, using it to capture information about the life of our participants. The context was sometimes quite formal, being in school, and as far as possible, the researchers used the same tools as the participants. We assured them they could delete items that they did not wish to share with us, and following this, they normally saved their Data Store (as Lifeblog calls it) to a CD or DVD and sent it to us. In this way we collected 4 separate Lifeblogs, each spanning several weeks, which we reconstituted in Lifeblog on our own computers and analysed in the following ways.

We looked at the Timeline feature, containing items that spanned the period of use, and categorised the form of items (image, SMS, MMS, video, text note, etc). We then considered the content of the images, notes and so on. We noted, for example, whether the images were of school, home, leisure, friends or family. Finally, we looked for storytelling forms, both across a set of items, or within an item, particularly in the video clips.

Findings

We found that the students treated the devices as a precious gift, and took great care of them. They created many videos, photographs, and used the image editing tools to provide context for the movies and stills. They also used SMS communication frequently, and downloads from Internet containing sports scores and video clips. Family and friends were the dominant themes in the material they shared with us, in the contexts of home and school. In this section, we look closely at the Lifeblogs of three of the students

Student A was a 14 year old who was often in trouble at school, and had previously been suspended for four weeks for bullying. He was considered at risk of dropping out. He enjoyed rugby and heavy metal music, and working part-time in a restaurant. He had previously used a mobile phone occasionally, only starting to text family and

friends a few months previously. Most of his text messages were about football. Once he received the phone, a teacher met regularly with him and a small group, with the intention of using the text features to improve their writing skills.

Figure 1 shows a screenshot from Student A's Lifeblog, annotated by us. It includes seventeen images, and one videoclip that had been imported into Lifeblog's 'muvee' feature. The accompanying text note reads 'This is a film of my friend shem I 'd film him then went to menu then movie then quick muvee and select a title and that's how I made a film (sic)' and is clearly prompted by his teacher.

We have circled three images that captured images of object (such as a CD cover) that appealed to him. All the other images are of family and friends. There is little evidence of narrative in this collection, though he was able to recount stories prompted by the images.

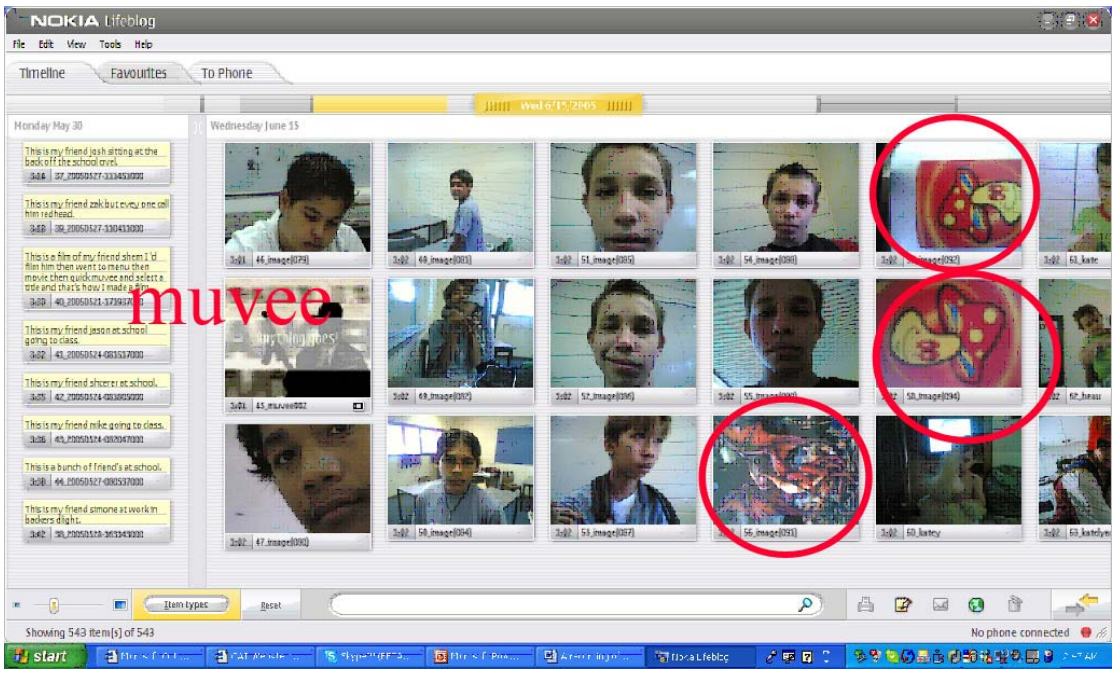

Figure 1: Lifeblog screenshot: Student A

In other parts of his Lifeblog, Student A included videos made at home, including family members. He told us 'This is my brother. I haven't seen him for while. And this is a movie of my little brother.' His text notes tended to be simple descriptors such as 'This is me holding my baby ness (niece)' and 'This is my favourite heavy metal call pantera.' Many of these movies could be construed as anecdotes of life at home. They included characterisation and were aesthetically pleasing, although of poorer quality than from a dedicated camera. This student (and most others we met) however, was not concerned with the quality, but with the emotion captured in his clips.

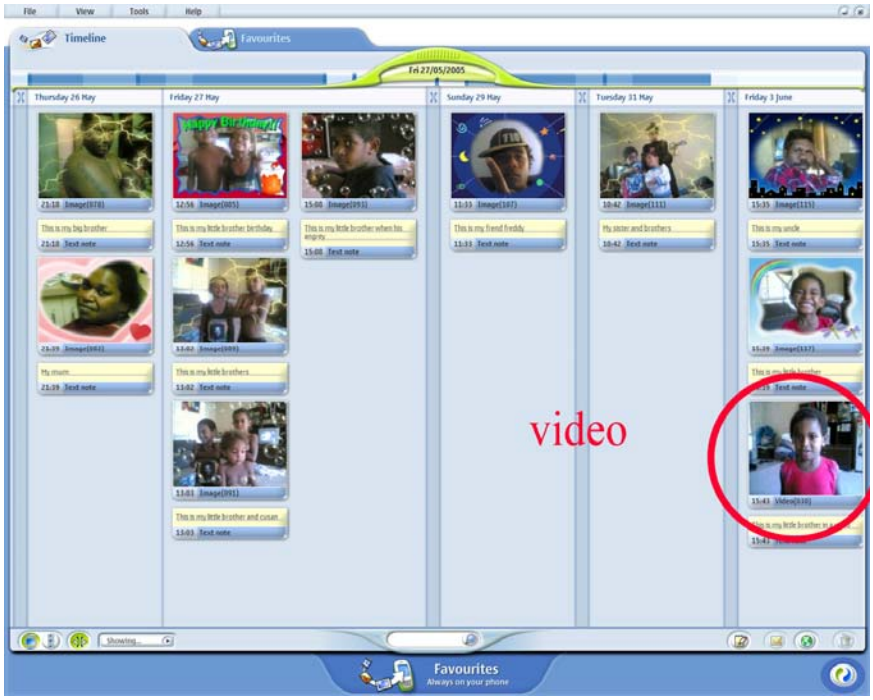

Figure 2: Collection of items in Timeline: Student B

Student B used his Lifeblog a little differently. Figure 2 shows a Timeline of items, containing ten images, one video clip, and eleven text notes, one describing the content of each item. In every case but one, the images are of family members. This student imported all his images into the image editing software on the phone. For example, he surrounded a photo of his mother with a pink heart, and one of his uncle with a city skyline. We suggest that the choices made in presenting the images indicate an early level of storytelling. It appears, for instance, that he associated his mother with love.

The video of his little brother (lower right in Figure 2) captured several attempts at singing the ABC song right through, with encouragement from his mother, who was holding the camera phone. Eventually the little boy managed to sing from A to Z and in tune! This clearly was an anecdote in Plum's (1988) terms. When shown to an audience later, it evoked involvement (will the little boy get to Z without faltering?) and a reaction of relief and some amusement when he did. A second video starring the little boy (partly shown in Figure 3) featured a toy motor bike, and was clearly a narrative of fantasy.

Figure 3: Motor bike narrative: Student B

Another video in his Lifeblog showed several brothers at home in their kitchen. The camera lingered on an older brother's interesting tattoo, (also captured in the top left image in Figure 2). To write a text note about this, he stopped the video at the point where he could clearly read the tattoo, and then wrote 'nagibu its my granfathers name he died when i was little (sic)'.

Student C began by taking images and videos around his boarding school, as shown in Figure 4, a screenshot that includes 3 video clips. (He did not adjust the date on his phone, so it appears as 01 January). He also used the phone for Internet connections and music downloads.

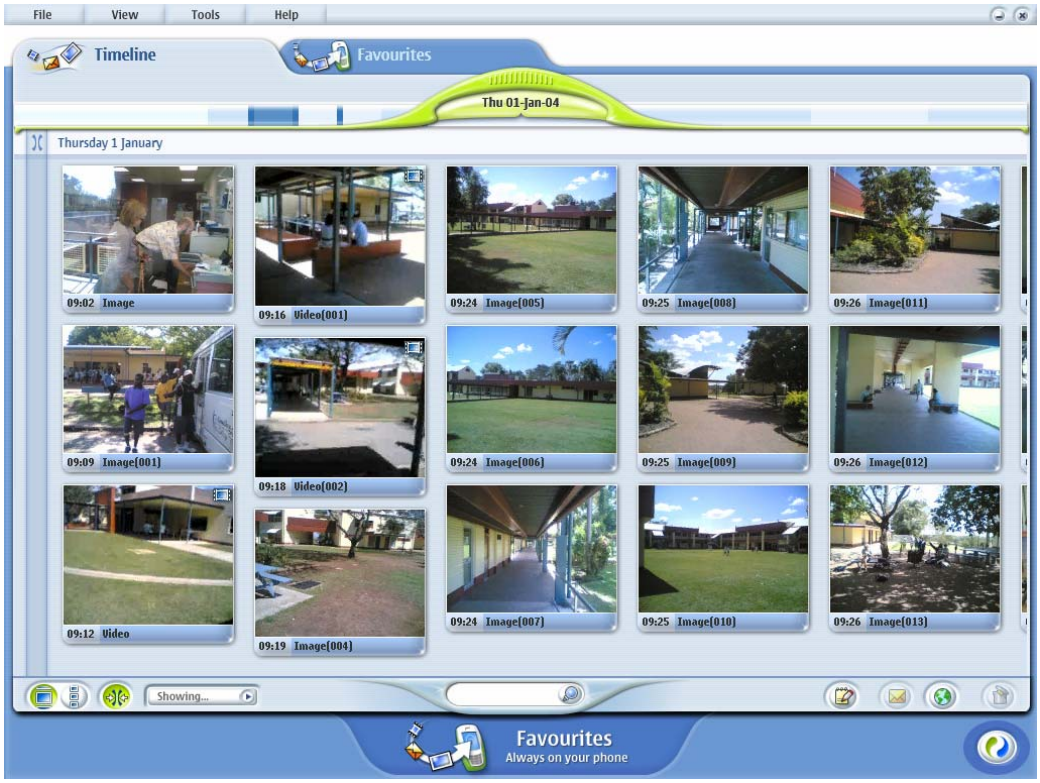

Figure 4: Early Lifeblog of Student C

However it was when he returned to his island community for the school holidays that this student took advantage of the camera phone to capture aspects of his rich cultural heritage, one based on oral and visual–rather than written–history. He told us that he used to buy a throwaway camera when he went home to the islands, and found the camera phone met his needs very well. In addition to writing down these stories at school, he made video clips, including stories told by his elders in the indigenous language, and was proud of the way he could continue the storytelling tradition in a digital form. It took him some time to get used to movie making on the phone, he said, as he had only used a phone to ring up people before. However his island did not have a telecommunications network, so his focus was filming daily life in the island community. Extended clips showed young people playing 'water polo' in the river, a group of youths on a lively trip in a minibus along a dusty road, and a very amusing story of a snake that escaped. Stills from the video are shown in Figure 5.

Figure 5: Still images from video of escaping snake: Student C

As he later described the scene to us, he and his friends had been hunting in the bush, and had 'whacked the python on the head a couple of times'. They were then trying to 'boil him up'. The snake woke up and climbed out of the pot, so they were chasing

him around. Not only is this a rich recount, when shared with an audience back at school it becomes a powerful window into the life of a student from an island community. Such recounts can inform the curriculum.

A final example from Student C shows how deep meaning can be supported by devices such as these camera phones. This was a sombre video recording of his grandmother singing, by a campfire, of his ancestor who had survived the white people's massacre of the indigenous community on the Tiwi Islands. This is clearly a narrative, telling how the old man hid inside a crocodile nest to escape the fire in the bushes, and how later, when he emerged, he was given a new name by the white men. This family song has been handed down through the generations, and Student C used the recording to help him learn the song because, as he told us, he is 'one of the next leaders'. When he grows up and sings this song it is his duty to teach his kids, so he said he 'had to learn it correctly'. He told us: 'My grandfather is dead. I know the stories and it's my responsibility to keep it strong.' This is both narrative and exemplum, rooted in the culture, and passing it on.

By giving these students a status item, and, perhaps, by valuing their everyday life in the school context, our small project appeared to increase their self-esteem, so that taking the phones back was more of an issue in this case that in other parts of our Lifeblog project. Although participants had been told throughout that this was to be the case, it was an ethical problem that we and at least one teacher had to grapple with.

Conclusions

Through this project, we saw the beginnings of various forms of storytelling facilitated by the mobile devices. We suggest that learning can be personalised by listening to students through such digital creations. There is potential for crossing boundaries between home and school though using technologies that belong in both environments, enabling students to contribute their life experience to the school curriculum.

If this is to occur, teachers will play a key role, and their attitudes need to be understood if mobile devices and the content created by students are to be valued in learning. Many authors (eg. Hannafin and Savenye, 1993) have noted the importance of teachers in introducing new technologies into learning. In this study we worked with teachers who volunteered to be involved, alleviating the problem of resistance. The teacher who met each week with the small group of students including students A and B encouraged them to bring evidence of their family life into the school via their mobile phones. Further, he encouraged them to reflect, albeit at a simple level, on the images and video, and to write simple sentences to describe them. This was an additional activity designed to increase the boys' engagement in school, and was not formally assessed as part of the curriculum, although there is clearly potential for this to occur, in a framework of digital literacies. Other teachers in this school allowed the phones in class, but did not incorporate them into lessons. In the boarding school, the teacher had a close relationship with Student C, and provided an enthusiastic audience for his created content, linking it with essay-writing and other assessed tasks.

We concluded that the mobile devices and digital content can be important tools in producing narratives of everyday life and recording culture. They require both action and reflection and thus can contribute to learning. In a longer project, with more time to make connections with learning and with a means of assessing the digital content, it seems possible that real learning gains could be made. As a result of this work, we intend to continue research into how mobile devices support learning, using narratives to organise and make sense of personally-created information. To do this, we will work with teachers in considering new areas of curriculum and assessment.

References

Berth, M. (2006). *Informal learning with mobile devices: moblogging as learning resource?* Paper presented at the Informal Learning and Digital Media Conference. Odense, Denmark.

Beyer, H., & Holtzblatt, K. (1998). *Contextual Design: Defining Customer-Centred System*. San Francisco: Morgan Kaufmann.

Brown, J., Collins, A., & Duguid, P. (1989). Situated Cognition and the culture of learning. *Educational Researcher, 18*(1), 32-42.

Brown, J., & Duguid, P. (1996). Stolen Knowledge. In H. McLellan (Ed.), *Situated Learning Perspectives* (pp. 47-56). Englewood Cliffs, NJ: Educational Technology Publications.

Bruner, J. (1991). The Narrative Construction of Reality. *Critical Inquiry, 18*(1), 1-21.

Carroll, R. (2006). Mobile Learning and Assessment Project (unpublished report). Chisholm Institute.

Chatwin, B. (1988). The Songlines. Melbourne: Penguin.

Cole, G. (2003, January 7). Ring tone revolution. *The Guardian*.

Cuban, L. (1984). *How teachers taught: Conspiracy and change in America's classrooms 1890-1970*.New York: Longman.

Cuttance, P., & Innovation and Best Practice Consortium. (2001). *School innovation: Pathway to the knowledge society*. Canberra: Department of Education, Training and Youth Affairs.

De Marrais, K., & LeCompte, M. (1999). *The way schools work: A social analysis of education* (3 ed.). New York: Longman.

Dewey, J. (1910). *How We Think*. Boston: Heath and Co.

Eggins, S. & Slade, D. (1997). *Analysing Casual Conversation.* London: Equinox.

Gaver, B., Dunne, T., & Pacenti, E. (1999). Design: Cultural Probes. *Interactions, 6*(1).

Gibbons, A.S. (2006). The interplay of learning objects and design architectures. *Educational Technology*. Jan-Feb 2006. 18-21.

Goodson, I. (1994). *Studying Curriculum*. Buckingham: Open University Press.

Green, H., Facer, K., Rudd, T., Dillon, P., & Humphreys, P. (2005). *Personalisation and Digital Technologies*. Bristol: NESTA Futurelab. Retrieved 14 November, 2006, from http://www.futurelab.org.uk/research/personalisation/report_01.htm

Hannafin, R., & Savenye, W. (1993). Technology in the Classroom: The Teacher's New Role and Resistance to IT. *Educational Technology, 33*(6), 26-31.

Hargreaves, A. (1994). Critical Introduction. In I. Goodson, *Studying Curriculum* (pp. 1-11). Buckingham: Open University Press.

Hartnell-Young, E., & Vetere, F. (2005). *Lifeblog: A new concept in Mobile Learning?* Paper presented at the IEEE International Workshop on Wireless and Mobile Technologies in Education (WMTE) Tokushima, Japan.

Hill, P., & Russell, V. J. (1999). Systemic, Whole-school Reform of the Middle Years of Schooling. In R. Bosker, B. Creemers & S. Stringfield (Eds.), *Enhancing Educational Excellence, Equity and Efficiency* (pp. 167-196). Dordrecht, The Netherlands: Kluwer Academic Publishers.

Kuipers, R. (2006). Rolf de Heer. In *The Australian Way* (Qantas Airways Ltd). August. pp 6-7.

Lave, J., & Wenger, E. (1994). *Situated Learning: Legitimate Peripheral Participation.* Cambridge: Cambridge University Press.

Mateas, M., & Sengers, P. (2003). *Narrative Intelligence*. Amsterdam: John Benjamins.

Petraglia, J. (1998). The real world on a short leash: The (mis)application of constructivism to the design of educational technology. *Educational Technology Research and Development, 46*(3), 53-65.

Plum, G.A. (1988). Types of spoken narrative. Paper presented at the LERN conference: Working with Genre. University of Technology, Sydney.

Plummer, K. (2001). *Documents of Life 2: An Invitation to Critical Humanism*. London: Sage.

Nokia. (2006). New Nokia Lifeblog - the photo diary that writes itself. Retrieved 30 March, 2006, from http://www.nokia.co.uk/nokia/0,,28358,00.html?press_release_id=http://press.nokia.com/PR/200603/1038181.xml

Roschelle, J. (2003). Unlocking the learning value of mobile phones. *Journal of Computer Assisted Learning, 19*(3), 260-272.

Scardamalia, M., & Bereiter, C. (1999). Schools as knowledge building organizations. In D. Keating & C. Hertzman (Eds.), *Developmental health and the wealth of nations: Social, biological and educational dynamics* (pp. 274-289). New York: The Guildford Press.

Vygotsky, L. (1978). Mind in Society: The Development of Higher Psychological Processes. Cambridge, MA: Harvard University Press.

Walker, K. (2006). Narrative and Mobile Learning in Practice and Theory.